

## ABSTRACT OF THE DISCLOSURE

A gas sensor includes a first space for a measurement gas from a gas-introducing hole via a first diffusion rate-determining section, a main pumping means for controlling a partial pressure of oxygen in the measurement gas introduced into the first space to have a predetermined value, a second space for the measurement gas from the first space via a second diffusion rate-determining section, and a measuring pumping means for reducing or decomposing a NO<sub>x</sub> component in the measurement gas introduced from the second space via a third diffusion rate-determining section so that oxygen produced thereby is pumped out to detect a current generated by pumping out the oxygen. A ratio ( $W_c/W_e$ ) between a width ( $W_e$ ) of an end of a sensor element and a width ( $W_c$ ) of the gas-introducing hole is not less than 30% and less than 70%.